



## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE



## **Patent Application**

OFFICIAL

Inventor(s) Arthu

Arthur Robert Calderbank

Case Name

Calderbank 19-6-

Ayman Naguib

42

Nambirajan Seshadri

4/28/1999

Serial No.

09/300494

Filing Date Examiner

Chieh M Fan

Group Art Unit

2634

Title

Combined Channel Coding and Space-Block Coding in a Multi-Antenna

Arrangement

ASSISTANT COMMISSIONER FOR PATENTS WASHINGTON, D.C. 20231 SIR:

## **AMENDMENT**

In response to an Office action dated April 10, 2001 please amend the aboveidentified application as follows:

IN THE SPECIFICATION:

Page 1, replace the title paragraph beginning at line1 with:--

show.

Combined Channel Coding and Space-Time Block Coding in a Multi-Antenna

Arrangement --;

Page 1, replace the paragraph beginning at line 14 with:--

 U.S. Application 09/114,838, filed July 14, 1998, titled "Combined Array Processing and Space-Time Coding," which is based on U.S. Provisional Application No. 60/052,689, filed July 17, 1997.--;

Page 4, replace the paragraph beginning at line 9 with:

In the aforementioned 09/114,838 application, an arrangement is disclosed that provides enhanced performance which is realized by employing a perspective that combines array signal processing with channel coding. Specifically, antennas at the transmitter are partitioned into small groups, and individual space-time codes are used to transmit information from each group of antennas. At the receiver, an individual space-time code is decoded by a linear array processing technique that suppresses signals



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PAGE 02

## OFFICIAL HENRY BRENDZEL

Henry Brendzel

	Complete If Known			
	Application Number		09/300494	
TRANSMITTAL FOR	Filing Date		4/28/1999	
(to be used for all correspondence after initial filing)		First Named Inventor		Arthur Robert Calderbank
		Examiner Name		Chieh M Fan
		Group/Art Unit		2634
Total number of pages in this Submission: this page, plus 11		Attorney Docket ID		Calderbank 19-6-42
ENCLOSURES (check all that apply)				
Fee Transmittal Form	Assignment Papers (for an Application)			Postcard(s)
Amendment/Response	Drawling(s)			Small Entity Statement
After Final	Licensing-related Papers			Request for a Refund
Affidavit(s)/Declaration(s)	Petition Routing Slip (TO/SB/69) and Accompanying Petition			After Allowance Communication to group
Extension of Time Request	To Convert a Provisional Application			Appeal Communication to Board of Appeals and Interferences
Information Disclosure Statement  Certified Copy of Priority document(s)	Power of Attorney, Revocation or Change of Correspondence Address			Appeal Communications to Group (Appeal Notice, Brief, Reply Brief)
Response to Missing Parts/ Incomplete Application	Express Abandonment			Proprietary Information
Response to Missing Parts under 37 CFR 1.2 or 1.53	Terminal Disclaimer			Status Letter
Declaration (no Missing Parts Notice)	To Convert to Statutory Invention Registration			Other
SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT				
Firm or Individual Name Henry J. Brendzel				
Signature #	Hen Burgel			Date 6/29/0/
CERTIFICATE OF MAILING I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelop addressed to the Assistant Commissioner for Patents, Washington D.C. 20231 on this date:				
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